

We claim:

1. A method of enhancing fluoride incorporation into and remineralization of a subject's teeth comprising administering to the subject's oral cavity an oral care composition comprising a phosphonate group containing polymeric mineral surface-active agent and one or more fluoride ion sources, thereby providing enhanced protection of teeth against caries and cavities and increased resistance to acid demineralization associated with caries processes.
2. A method according to Claim 1, wherein the phosphonate group containing polymeric mineral surface active agent comprised in the oral care composition is selected from copolymers or cotelomers prepared from copolymerizing acrylate or methacrylate monomers with diphosphonate or polyphosphonate containing monomers.
3. A method according to Claim 2, wherein the phosphonate group containing polymeric mineral surface active agent comprised in the oral care composition is a diphosphonate/acrylate copolymer or cotelomer.
4. A method according to Claim 1, wherein the fluoride ion source is selected from sodium fluoride, stannous fluoride, indium fluoride, amine fluoride and sodium monofluorophosphate and provides from about 50 ppm to about 5000 ppm of free fluoride ions.
5. A method according to Claim 1, wherein the administered oral care composition further comprises one or more additional oral care agents selected from the group consisting of antimicrobial/antiplaque agents, biofilm inhibiting agents, dentinal desensitizing agents; anticalculus agents, calcium ion sources, strontium ion sources, phosphate ion sources, teeth whitening agents, odor masking agents; and mixtures thereof.
6. A method according to Claim 5, wherein the administered oral care composition further comprises an antimicrobial/antiplaque agent selected from the group consisting of triclosan, cetylpyridinium chloride, chlorhexidine, alexidine, hexetidine, sanguinarine, benzalkonium chloride, salicylanilide, domiphen bromide, cetylpyridinium chloride (CPC), tetradecylpyridinium chloride (TPC), N-tetradecyl-4-ethylpyridinium chloride (TDEPC), octenidine, delmopinol, octapinol, nisin, a zinc ion source, a stannous ion source, a copper ion

source, an essential oil and mixtures thereof, thereby providing benefits against gingivitis, periodontal disease and oral infections.

7. A method according to Claim 5, wherein the administered oral care composition further comprises one or a mixture of dentinal desensitizing agent selected from salts of potassium, calcium, strontium and tin.

8 A method according to Claim 5, wherein the administered oral care composition further comprises one or a mixture of a calcium ion source, a phosphate ion source or a strontium ion source, thereby further enhancing remineralization of teeth.

9. A method according to Claim 5, wherein the administered oral care composition further comprises a teeth whitening agent selected from the group consisting of hydrogen peroxide, calcium peroxide, urea peroxide, sodium percarbonate, sodium chlorite and mixtures thereof.

10. A method according to Claim 1, wherein the administered oral care composition is in a form selected from toothpaste, tooth powder, tooth gel, mouthrinse, denture product, mouthspray, lozenge, chewable dentifrice tablet, or chewing gum.